



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,353	03/03/2004	Heinz Hermening	27,593 USA	4520
23307 7590 01/04/2007 SYNNESTVEDT & LECHNER, LLP 2600 ARAMARK TOWER 1101 MARKET STREET PHILADELPHIA, PA 191072950			EXAMINER NGUYEN, PHU HOANG	
			ART UNIT 1731	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/04/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/792,353

Applicant(s)

HERMENING ET AL.

Examiner

Phu H. Nguyen

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3/21/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-45 is/are rejected.
- 7) ☒ Claim(s) 17-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/3/2004, 7/17/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claims 19-22,25-27,31-33,37,40,43 are objected to because of the following informalities: claim 19 is depending on claim 1 which was canceled. For purpose of examination, the examiner will assume claim 19 is depending on claim 17 instead of claim 1.

Appropriate correction is required.

### ***Specification***

The disclosure is objected to because of the following informalities: on line 21 of page 3, the phrase "tow" should be "two".

In claims 41-43 the phrase "reciprocably" should be "reciprocally".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 17-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "worm gear" in the 2<sup>nd</sup> line of the last paragraph. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner assumes "worm gear" is the same as the screw (44) recited in the Specification (line 10-11, page 9) of the instant application.

Art Unit: 1731

Claims 30-37 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "said first and second partial toothed wheels being rotationally adjustable about an axis of rotation with respect to each other in order to minimize clearance between the intermediate toothed wheel and the pinion and the toothed wheel at the periphery thereof" is indefinite. The first and second partial toothed wheels are replacement of the intermediate toothed wheel; therefore the intermediate toothed wheel is nonexistence with the present of the first and second partial toothed wheels according to the Specification (line 23-25). For purpose of examination, the examiner interprets claims 30-34 as adding further limitation by replacing the intermediate toothed wheel with two partial toothed wheels to reduce the total area (the sum of the areas of the two partial toothed wheels is less than the area of the intermediate that they replaced).

***Claim Rejections - 35 USC § 103***

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) in view of Gallienne (U.S Patent No. 5832780).

Regarding claim 17, Trudeau discloses an apparatus (corresponding to the claimed "apparatus" recited in the instant claim 17) for delivering mold charges, or "gobs", of molten glass to I.S. (individual section) forming machine (line 24-26, column 1). The apparatus delivers by gravity simultaneous to several mold charges of molten glass to each of a plurality of section of forming

Art Unit: 1731

machine, one section at a time and in a predetermined order (line 40-45, column 1).

Trudeau also discloses the apparatus provide a plural deflector scoop arrangement (corresponding to the claimed "at least one scoop channel" recited in the instant claim 17) (line 64-65, column 1). Trudeau discloses the movable deflector scoop interposed between a flow feeder and inclined troughs to section of a forming machine, the scoop being oscillated in a horizontal plane to register its discharge end (corresponding to the claimed "second end" recited in the instant claim 17) with the receiving need of successive rigid troughs (corresponding to the claimed "scoop rotatable about an axis for aligning said second end of said scoop channel with said stationary channels" recited in the instant claim 17). Trudeau further discloses each scoop having an upper open receiving end (corresponding to "first end" recited in the instant claim 17) beneath and coaxial with a bottom outlet of a glass feeder (line 54-60, column 1).

In Fig.2, Trudeau discloses a pinion (27) (corresponding to the claimed "a pinion attached to said scoop channel" recited in the instant claim 17) in gear box (26).

Trudeau discloses a motor (41) (corresponding to the claimed "an electrical motor for rotating" recited in the instant claim 17) that rotates said pinion and thereby rotating said scoop channel about said axis (line 8-29, column 3).

Trudeau discloses gear box (26) (corresponding to the claimed "gear train transmitting torque from said motor to said pinion" recited in the instant claim 17)

Art Unit: 1731

in Fig.2. Gear box (26) includes a worm (39) (corresponding to the claimed "worm gear" recited in the instant claim 17) engaged with motor (41) by shaft (40) in a reciprocating manner. Trudeau shows in Fig.2 the worm (39) engaged with worm wheel (38) that rotates sector gear (28) (corresponding to the claimed "toothed wheel" recited in the instant claim 17); the sector gear (28) drives pinion (2) for effecting rotation of scoop channel upon rotation of said worm gear by said motor. Trudeau did not disclose mounting of the toothed wheel coaxially with the worm wheel. Gallienne discloses a compact (reduce overall dimensions, line 25-27, column 1) gear in Fig.1 that teaches the mounting of toothed gear (5) coaxially with worm wheel (3) which engaged with worm gear (2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce the overall dimension of the gear train by mounting the toothed wheel coaxially with the worm wheel.

Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) as applied to claim 17 above, and further in view of Fenton (EP0133775A2). The combination of Trudeau and Gallienne did not disclose the use of intermediate toothed wheel for transmission of torque from said tooth wheel which coaxially mounted with the worm wheel to said pinion. Fenton discloses annular pinions of the scoop channels are rotationally driven by the toothed crown either directly (Figs.1 and 3) or via a driving toothed wheel and an intermediate toothed wheel (Fig.7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute direct driving of pinions with

Art Unit: 1731

intermediate toothed wheel as taught by Fenton. Furthermore, Trudeau discloses an invention to provide a plural deflector scoop arrangement comprising two generally scoops (line 64-66, column 1). Adding parts to provide more than two scoops would still be in the scope of providing a plural deflector scoop arrangement. The mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Claims 23-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187), Gallienne (U.S Patent No. 5832780) and further in view of Fenton (EP0133775A2) as applied to claims 17-21 above, and further in view of Kawachi et al. (U.S Patent No. 4793847). The combination of did not disclose the scoop channel comprises with a housing, a sleeve within the housing. Kawachi discloses an invention to provide a simple and small gob distributing apparatus in a bottle making machine in which a scoop can be easily and accurately controlled. Kawachi discloses said apparatus having a feeder which feeds the gobs and a scoop which is actuated to distribute the gobs to desired chutes in a predetermined order, where in said scoop has a vertical shaft portion (corresponding to the claimed "sleeve" recited in the instant claims 23-27) which is rotatably supported by a body (corresponding to the claimed "housing" recited in the instant claims 23-27) of the apparatus and which provided, on its outer periphery, with a plurality of rollers (corresponding to the claimed "pinion" recited in the instant claims 23-27) located in a concentrically arrangement (line 4-20, column 2). Therefore it would have been obvious to one of ordinary skill in

Art Unit: 1731

the art at the time the invention was made to make a scoop channel comprises a housing, a sleeve rotatably mounted within said housing, pinion comprises an externally toothed ring surrounding said sleeve and attached thereto to rotate said sleeve.

Claim 28,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187), Gallienne (U.S Patent No. 5832780), Fenton (EP0133775A2) and Kawachi et al. (U.S Patent No. 4793847) as applied to claim 23 above, and further in view of Bennett (U.S Patent No. 6318130). The combination of Trudeau, Gallienne, Fenton and Kawachi did not disclose a gob distributor with a cooling system.

Regarding claim 28, Bennett discloses an invention to maintain the same temperature in gob flow channels by having at least one liquid coolant passage integrated with each channel in parallel between source and return liquid coolant manifolds (line 4-19, column 2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve uniformity of temperature of gob delivering by integrate liquid coolant to the outer sleeve of scoop channels.

Regarding claim 29, Bennett discloses an alternative way of cooling gob deflector is the conventional air-cooling method (line 62-64, column 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to open the cooling duct to the atmosphere and connect the cooling duct with cooling gas supply as an alternative way of cooling gob deflector.



Art Unit: 1731

Claims 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) and Fenton (EP0133775A2) as applied to claim 17-19 above. Fenton (EP0133775A2) also discloses coupling connection between the electrical motor to worm gear (line11-17, page 13). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coupling connecting electrical motor to worm gear.

Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) and Fenton (EP0133775A2) as applied to claim 17-19 above, and further in view of Struckmeier et al. (U.S Patent No. 5824129). The combination of Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) and Fenton (EP0133775A2) did not disclose pivotally mounting of gob distributor on glass forming machine. Struckmeier discloses a preferably mounting of gob distributor (to achieve rapid and accurate adjustment of the gob distributor) on glass forming machine with a scoop swivellable about a vertical axis (corresponding to the claimed "reciprocally pivoting" recited in the instant claims 41-43), the centering pin is preferably concentric with respect to the swivel axis of the scoop. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have means for pivotally mounting gob distributor on glass forming machine for reciprocally pivoting gob distributor about a vertical axis to achieve rapid and accurate adjustment of the gob distributor.

Art Unit: 1731

Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780), Fenton (EP0133775A2) and Struckmeier et al. (U.S Patent No. 5824129) as applied to claim 41 above, and further in view of Fenton (US. Patent No. 4756736). Fenton (U.S Patent No. 4756736) discloses moving means (corresponding to the claimed "piston and cylinder" recited in the instant claims 44 and 45) and positioning means (corresponding to the claimed "positioning body" "positioning stop" "lever" recited in claims 44 and 45) (line 11-43, column 2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the apparatus for distributing gobs in a glassware manufacturing machine with moving means to move the gob distributor to appropriate receiving forming machine and positioning means to position the gob distributor in the normal position.

#### ***Allowable Subject Matter***

Claims 30-37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schneider et al. (U.S Patent No. 7047766) discloses a very stable and reliable transmission between the first wheel (driven by motor in a reciprocating

Art Unit: 1731

manner) and second wheel (corresponding to the claimed "pinion" recited in the instant claim 18) by an intermediate toothed wheel.

Fenton (EP0133775A2) discloses individual glass molding units call "sections" can work in single (receives one gob of molten glass at a time), double, triple or even quadruple gob modes (line 20-23, page 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu H. Nguyen whose telephone number is 571-272-25931. The examiner can normally be reached on M-F.

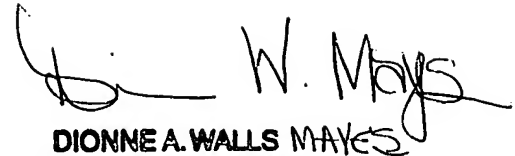
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1731

P/N

12/04/2006

  
**DIONNE A. WALLS MAYES**  
**PRIMARY EXAMINER**